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CLAIMS

1. A process for forming an underlying film, comprising: irradiating the surface of an insulating film disposed on an electronic device substrate with plasma  
5 based on a process gas comprising at least an oxygen atom-containing gas, to thereby form an underlying film at the interface between the insulating film and the electronic device substrate.

2. A process for forming an underlying film according to claim 1, wherein the insulating film is a  
10 film comprising a high-k (high-dielectric constant) material.

3. A process for forming an underlying film according to claim 1 or 2, wherein the plasma is plasma  
15 containing oxygen radicals.

4. A process for forming an underlying film according to any one of claims 1 to 3, wherein the underlying film is an oxide film.

5. A process for forming an underlying film according to any one of claims 1 to 4, wherein the plasma  
20 is plasma based on a plane antenna member (RLSA).

6. An electronic device material, comprising: an electronic device substrate, an underlying film disposed on the substrate, and an insulating film disposed on the  
25 underlying film,

wherein the underlying film is a film which has been formed by supplying plasma from the insulating layer side.

7. The electronic device material according to claim  
30 6, wherein the insulating film is a film comprising a high-k (high-dielectric constant) material.